

ABSTRACT OF THE DISCLOSURE

In a method for preventing rollover for a vehicle traveling on a road, for each present position of the vehicle as it moves forward, its speed is forecasted for ~~[[each]]~~ future ~~position~~ positions of the vehicle on the road, based on an assumption regarding ~~[[a]]~~ driving style of ~~a driver of said vehicle~~ the operator, and based on a map containing road geometry data and statistical speed data for vehicles traveling said road. At each such present position of the vehicle, a maximum safe speed ~~of the vehicle~~ is determined for ~~each of a plurality of~~ points on the road forward of the vehicle, based on a ~~[[--]]~~ maximum lateral acceleration, the road geometry and the ~~physical~~ vehicle ~~parameters of the vehicle~~. A rollover warning is generated for any current position of the vehicle at which the forecasted future speed for at least one particular point on the road forward of the vehicle exceeds the determined maximum safe speed at that particular point. ~~The maximum safe speed is a speed beyond which it becomes unavoidable that the vehicle will subsequently, but not necessarily immediately, encounter a lateral acceleration that will cause it to roll over, given the road geometry.~~